# C4ISR ACCELERATION SYMPOSIUM

19.SEP.07



**MG JEFF SORENSON** 

CALL TO DUTY: BOOTS ON THE GROUND - ARMY STRONG





#### **Agenda**

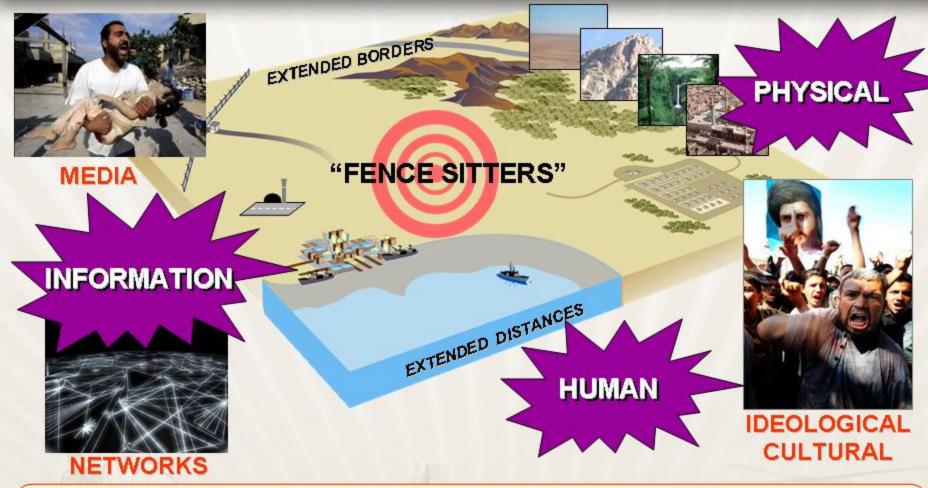


- \* Complex Operating Environment
- \* Army Initiatives
- ★ CIO/G-6 500-Day Plan
- ★ Top 6
- \* Conclusion



## Complex Operating Environments





"The prize in the counterinsurgency fight is...the people." - COL Sean MacFarland, CDR, 1-1 AD, 1 May 2007



#### **Persistent Conflict**



"persistent conflict ... a period of protracted confrontation among state, non-state, and individual actors who will increasingly use violence as a means of achieving their political and ideological objectives...

This protracted confrontation will be fueled by six important trends...

- ... positive and negative impact of globalization
- ... competition for energy
- ...demographic trends increase instability
- ...climate changes and natural disasters
- ...proliferation of weapons of mass destruction
- ...failed or failing states providing safe havens"



General George Casey, CSA National Press Club, 14 Aug 07



#### Identified Future Force Gaps

- Modular, Scalable and Tailorable Battle Command and Control
- Dynamic, Uninterrupted Communications Network
- Ability to Train the Force How and As it Fights



### 7 Army Initiatives



- 1. Accelerate growth and readiness improvements
- 2. Enhance the quality of support to Soldiers, civilians and families
- 3. Sustain the momentum of modernization
- 4. Complete reserve component transition to an operational force
- 5. Improve leader development to grow leaders for tomorrow's strategic environment
- 6. Adapt Army institutions to support an expeditionary Army at war
- 7. <u>Build strategic communication capabilities</u> to effectively communicate with <u>internal and external audiences</u>



## CIO/G-6 500-Day Plan



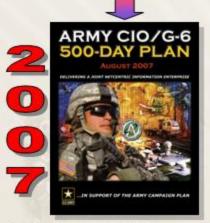




- Vision: Deliver a Joint Net-Centric Info Enterprise
- Established six Strategic Goals



- Provided major accomplishments and way ahead
- Delineated Future Challenges for the six Strategic Goals



19 September 2007

- Sets expectations with <u>five rolling 100-day</u> <u>increments</u> and <u>measurable criteria</u> for each Strategic Goal
- http://www.army.mil/ciog6/









## **AVERAGE SOLDIER PROFILE**



RANK: E-4 (Corporal / Specialist)

**AGE: 22** 

**TIME IN SERVICE: 4 Years** 

**BASE PAY: \$1,978.50/month** 

**EDUCATION:** High School Graduate

MARITAL STATUS: Married w/ two Children

RACE: 60% Caucasian/40% Minority

GENDER: 85% Male/15% Female

**AVERAGE WORK DAY: When the mission is complete** 











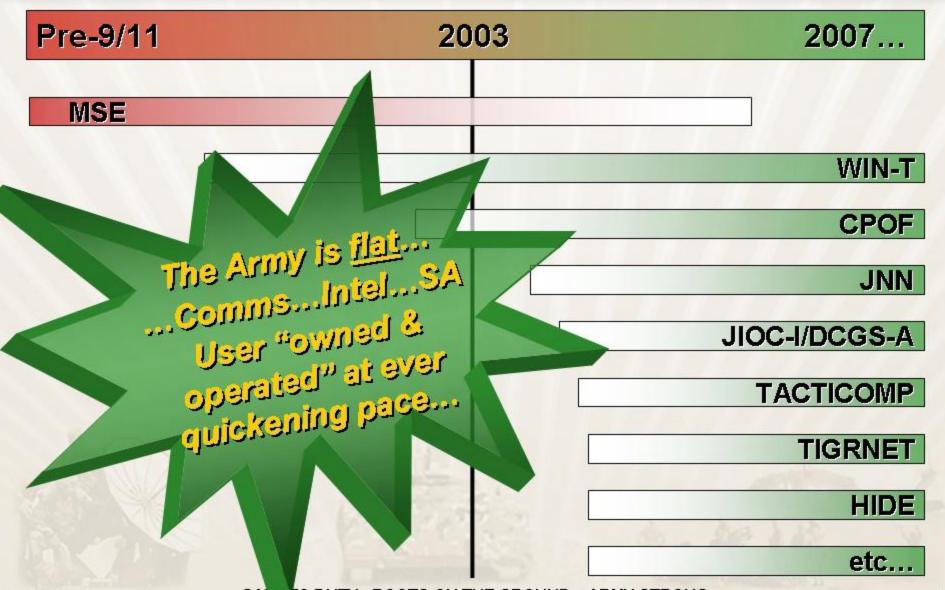
**®** Technology Integration

... No Longer Business as Usual



### No Longer Business As Usual









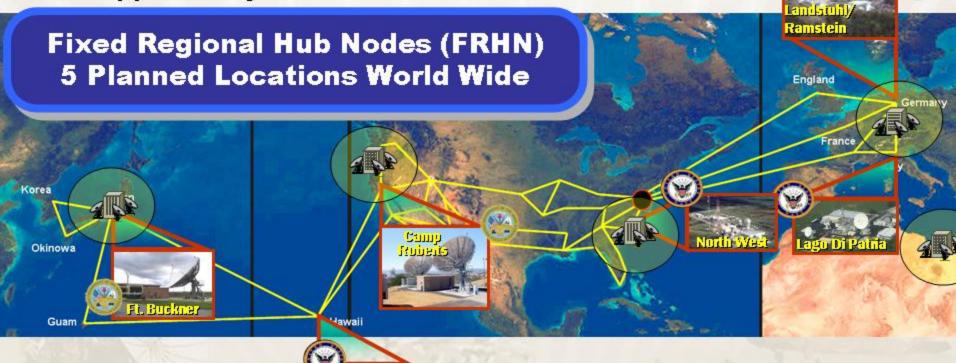
- **Soldiers**
- Technology Integration
- Modernization
  - ... Fixed Regional Hub Nodes
  - ... Area Processing Centers



## **Fixed Regional Hub Nodes**



- Five locations to provide complete & overlapping coverage of Combatant Command Areas of Responsibility (AOR)
  - All connected to the Global Information Grid (GIG)
  - Focus on Intertheater vs. Reachback via Teleports
  - Support Army/USMC Units & Comm-on-the-Move

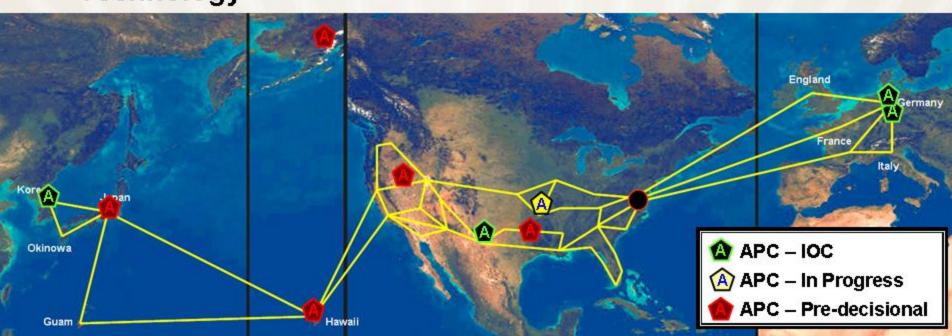




### **Area Processing Centers**



- The purpose of the APC initiative is to improve delivery services through:
  - Achieving Net-Centric Operations and Warfare Environment
  - Improving IA and Security Posture
  - Reducing Total Cost of Ownership (TCO) for Information Technology







- **Soldiers**
- Technology Integration
- @Infrastructure Modernization
- **Network Security** 
  - ... CONUS Signal Command (Theater)
  - ... IT Security Way Ahead

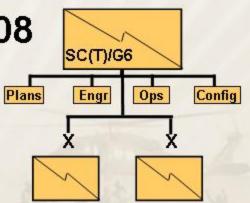


## **CONUS Signal Command (Theater)**



#### CONUS SC(T) with HQs & 2 Brigades

- Single Commander responsible for operation & defense of CONUS LandWarNet
- Provides improved ability to dynamically adjust network priorities & availability
- Enhances ability of expeditionary forces to rehearse as they fight, transition, and maintain OPTEMPO across all phases
- Phased activation beginning in FY08
  - CADRE 16 May 2008
  - IOC 16 January 2009
  - FOC 16 January 2010





# **IT Security Way Ahead**





**Active Directory** 

Secure the Operating System



**CAC/PKI Logins** 

Army @ 94%\*\*

Server 2003

Server 2008



Asset Discovery Tool

**Encrypt E-mail** 

**Encrypt Data at Rest** 

Consolidate APCs - - DISA Mega Centers

Thin-Client



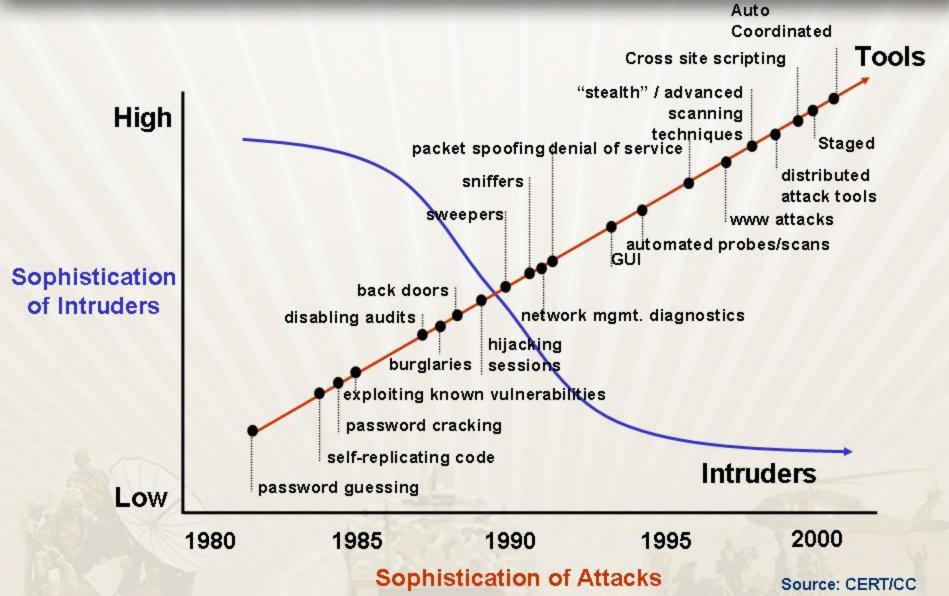


- **Soldiers**
- **®** Technology Integration
- **MInfrastructure Modernization**
- **Network Security**
- **@** Cyberwarfare



# **Growth of Threat Capability**







# The Cyberspace Domain



#### Working Definition of Cyberspace:

"A domain characterized by the use of electronics and the electromagnetic spectrum to store, modify, and exchange data via networked systems and associated physical infrastructures"

- Cyberspace domain is analogous to air, land, sea, & space domains
- Cyberspace is a place where DoD must be ready and capable to fight
- Cyberspace is global: erases time/space constraints; access straightforward
- Successful operations require: awareness, speed, integration
- Requires similar components-infrastructure, capabilities, resources

- Source: National Military Strategy for Cyberspace Operations, Joint Staff/J-6





- **Soldiers**
- **®** Technology Integration
- **MInfrastructure Modernization**
- **Network Security**
- **©** Cyberwarfare
- **MABCS** → FCS



#### Current-to-Future Force through Technology Spin Outs



#### FCS - System Development and Demonstration

Spin-out 1 FY 2008-10

Networked Sensors/ Shooters

- Limited Battle Command
- JTRS (GMR/HMS)
- Unattended ground sensors
- Non-line of sight launch systems

Spin-out 2 FY 2010-12

Systems/Component -APS

- Mast Mounted Sensor Options:
- Small UGV - Class 1 UAV

Spin-out 3 FY 2012-14

> **Network and Ground** Air Vehicles

- ABCS to FCS **Battle Command**
- ARV-A-L Small UGV Class I UAV Class IV UAV

Core **Program** Delivery FY 2015

Joint Networked System of Systems



Infantry Stryker



Heavy

Fielding 6 Current Force BCTs/Yr (70)

Current

**Future** 

Fielding 15 FCS BCTs



Infantry Stryker Heavy



FCS

essons learned **OIF and OFF** 

2004-2006 RAVEN Tactical UAV Interceptor Body Armor (IBA) Counter IED (Warlock, Duke) Uparmored Vehicles (UAH, AoA) Buffalo mine-clearing vehicle



ARH (2009) LUH (2008) DCGS-A (V3) (2007)

Excalibur (2007)

2010 and beyond

WIN-T (2014) JTRS AMF (2011-12)

**Apache Longbow** Block III (2011)

#### Related Advanced Developments



# Take Aways!!!



- Posturing for Persistent Conflict!!!
- @ CIO/G-6 500 Day Plan
- No Longer Business as Usual
- Infrastructure Modernization
- Network Security & Cyberwarfare
- © Current-to-Future Force

# Questions & Thoughts

"Army Modernization envisions both the rapid fielding of the best new equipment to our forces that are fighting every day and future combat systems. We are ultimately working toward an agile, globally responsive Army empowered by modern networks, surveillance sensors, and weapons that are lighter and less manpowerintensive, and employed in modular units that are able to operate effectively, again across the spectrum of conflict with joint and coalition partners."

> -- CSA General George Casey Remarks National Press Club 14 August 2007



Army Strong!